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AUTHOR Bar-Tal, Daniel; And Others
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ABSTRACT

Weiner, et al, (1971) presented a model of achievement-related behavior which outlined how causal ascriptions might mediate between stimulus conditions and achievement-oriented responses. This model assumed that individuals allocate the causes of success and failure to four elements (ability, effort, luck and task difficulty), and that each of these causal attributions would produce different behavioral and emotional reactions. Other studies (Bar-Tal and Frieze, 1973; Kukla, 1972; Weiner and Kukla, 1970; and Weiner and Potepan, 1970) have demonstrated that high and low achievement motivation subgroups display differential causal attributional patterns which may explain their varying responses to achievement situations. These findings indicate the need for better understanding and modification of attributional patterns of individuals low in achievement motivation. Possible ways of initiating such changes are reviewed in the context of the educational process. (Author)

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Attributional Analysis of Achievement Motivation: Some Applications to Education

Daniel Bar-Tal, Irene Frieze, and Martin S. Greenberg

Atkinson's theory of achievement motivation (1964) conceives of achievement-oriented behavior as a product of motivational factors within the person as well as of characteristics of the particular achievement task. He hypothesizes that the perception of an achievement task arouses both the hope of success and the fear of failure, emotional reactions which result respectively in approach and avoidance responses. The actual achievement-oriented behavior will be the resultant of these two conflicting responses. Atkinson's theory has been found useful in understanding differential reactions of students to a number of classroom variables. Students who are relatively high in their hope for success as compared to their fears of failure tend to be highly motivated to achieve following a failure experience and respond positively to challenging tasks. It has also been noted that students, who are labeled as having high achievement respond well to ability grouping, are bored by the traditional programmed texts which guarantee learning without failure, and are motivated to work harder when given low midterm grades. Students with low achievement motivation, on the other hand, tend to perform somewhat better in heterogeneous classes, prefer programmed texts, and are more motivated by high midterm than low midterm grades. Although more research on applying these ideas to the actual classroom situation is needed, the available data tends to support these findings (Weiner, 1972).

Whereas Atkinson's approach places great emphasis on affective reactions as mediators of achievement-related behavior, more recent theorizing suggests that cognitive variables may have even more potential for explaining apparent motivation differences with regard to achievement behavior. Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum (1971) have proposed a model for achievement-related behavior which assumes that beliefs about the causes of success and failure are important mediators between the perceptions of an achievement task and the final

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achievement-oriented behavior. It is assumed by Weiner, et al. that individuals allocate the causes of success and failure to four causal elements: ability, effort, task difficulty, and luck. These elements may be classified according to two dimensions: locus of control and stability. Ability and effort are causes within the person (internal locus), while task difficulty and luck are outside of the person (external locus). Ability and task difficulty are relatively unchangeable as a person reattempts the same task again and again and are thus considered highly stable, whereas effort and luck are highly variable and are thus considered less stable. These dimensions of locus of control and stability have been found to be important in understanding respectively the affective reactions to the success or failure and the changes in perceived probability of success for future outcomes (Weiner, Heckhausen, Meyer, and Cook, 1972). For example, in a success situation, people feel maximum pride when they can attribute their high performance to either their ability or effort. Attributions to good luck or the task's being easy produce considerably lessened pride. Furthermore, when one perceives his successes as caused by good luck, the resulting expectancy is that failures will occur in the future since luck is an unstable factor which is believed to fluctuate over time. Similar implications are found for attributions about the causes of failure. Failures attributed to lack of ability result in shame as well as decreased trying since one assumes that his ability will not increase greatly and therefore that future performances will show little improvement. Lack of effort attributions, although causing shame, also result in increased rather than lessened trying since the implication is that performance would have been better if more effort had been exerted. Attributions to a very difficult task or bad luck as being the cause of the failure result in little shame since no personal responsibility is taken for failure. However, such external attributions do not necessarily result in persistance.

A series of empirical studies (Kukla, 1972; Weiner and Kukla, 1970; Weiner and Potepan, 1970) have demonstrated that contrasting achievement motive subgroups display differential causal ascriptions to the causal elements of ability and effort. Individuals high in achievement needs relative to those low in achievement motivation attribute success to their ability and effort, and their failures to lack of effort or external factors. Individuals low in achievement needs ascribe their failures more to lack of ability, success to external factors, and in general perceive themselves as low in abillty. These differential cognitive appraisals of task situations help to explain behavioral differences between those with high as compared to low achievement motivation. For example, Bar-Tal and Frieze (1973) demonstrated that both male and female college students with low achievement motivation have lower estimates of their abilities on a task than students with high achievement motivation, even when both groups objectively experienced the same amount of success and failure on the experimental tasks. Even when they succeed, males and females with low achievement motivation were more likely to believe that their success derived from their trying particularly hard rather than from their ability to do well on a consistent basis. Given this type of attributional pattern, it is evident why these people have low achievement motivation and therefore high fear of failure. Low achievement motivation seems to be equated with low estimates of ability which are not modified by success experiences, since success is perceived as due to the unstable factor of effort more than to underlying stable abilities. High achievement motivation, on the other hand, is related to high estimates of ability which are reinforced with every success experience. It is therefore not surprising that students classified as having low achievement motivation have been found to avoid achievement related activities, to quit in the face of failure, to select unrealistic goals and to perform with relatively little vigor (Weiner, 1972).

It appears that the patterns of forming causal attributions differ in various social groups. These differences are learned. Evidence by Katz (1967) and Coleman et al. (1966) suggest that the cognitive systems pertinent to achievement motivation may be learned differentially by various racial and social class groupings. For example, Katz suggested that Blacks may not develop the cognitive structures which support the efficacy of effort (i.e., Blacks do not appear to make effort attributions and do not perceive the covariation in effort and outcome which normally occurs in the world).

Weiner (1972) and others (e.g., Bar-Tal and Frieze, 1973) have contended that the differing attributional patterns of those with high as compared to low achievement motivation are responsible for a number of their contrasting behaviors. This would suggest that if the attributions made by those with low achievement needs could be changed, they would demonstrate more of the adaptive behavior characteristic of those with high achievement needs.

Studies done by Bar-Tal and Frieze (1973) and Weiner and Sierad (in press) suggest some mechanisms by which perceptions of the causes of success and failure might be altered. Bar-Tal and Frieze employed music along with an achievement task. One thid of the subjects were told the music would facilitate performance, another thid that the music would inhibit performance, and the final third of the subjects were told that the music would have no effect on their performance. Results indicated that those instructions did affect the causal attributions made by subjects in the experiment. For subjects who were told the music would facilitate their performance and who actually succeeded, the task was perceived as more difficult if they succeeded than subjects who succeeded and were told that the music would decrease their performance. In the later condition, it was suggested that since subjects expected difficulty in performing well because of the music they perceived their relatively-easy success as due to the task being less difficult. On the other hand, subjects who anticipated an easy success because of

the facilitation of the music evaluated the task as relatively more difficult. There was also a nonsignificant trend for low achievers who succeeded after being told music would hinder their performance to see themselves as having relatively more ability than when told the music would help them.

Weiner and Sierad have further demonstrated one way in which the attributions of high and low achievement motivated individuals might be changed and have shown that differential behaviors will result from such manipulations of attribution in a failure situation. In their experiment, subjects were given a placebo which they were told would interfere with their performance on a simple achievement task. Other subjects who did not receive the placebo served in the control condition. It was hypothesized that for those with low achievement motivation, the pill would provide an excuse for failure, so that anxiety about demonstrating their low abilities would be reduced and therefore, the pill group would perform better than the control group. On the other hand, subjects high in achievement motivation who usually tend to attribute their failures to lack of effort would also shift their causal attribution to the placebo as a result of the experimental instructions. Normally those with high achievement needs are motivated by failure since their belief in lack of effort as the cause of their failure makes them try even harder. In this case, subjects would believe that the detrimental effects of the placebo could not be changed and therefore would not try as hard as they normally might. Thus, it was predicted that for high achievement motivated subjects performance would be maximized in the control condition. Results of the Weiner and Sierad study confirmed these predictions. Having an external excuse for failure improved the performance of those with low achievement motivation while it decreased the performance of those with high achievement motivation.

These two studies provide a demonstration of methods which might be utilized to manipulate and change individuals' perceptions of the causes of their successes and failures. They also confirm the importance of causal attributions

in understanding classroom behaviors. In the traditional classroom, the teacher assigns tasks in a largely undifferentiated way. Pupils with high and low achievement motivation receive the same instructions and the same form of feedback. The attributional approach to understanding achievement behavior and achievement motivation indicates the necessity for approaching students more individually, taking into account their differing cognitive causal structures. People with low achievement motivation are handicapped by their low estimates of their abilities since they expect to experience repeated failures as they attempt achievement tasks. With this orientation, they naturally avoid achievement activities and fail to reach their potential. The belief that their academic failure is due to their low ability will inhibit their motivation to try harder in the future. On the other hand, the beliefs that success is due to external factors (e.g., ease of test) do not encourage one to make efforts to succeed and to believe in one's ability. In the light of all these implications it seems important to introduce training programs for pupils with low achievement motivation.

Training in attributional patterns might be done in several ways: (a) The instructions prior to a task may provide the possibility to ascribe failure to external factors and lack of trying, and/or to ascribe success to ability and effort; (b) The feedback given after completion of a task should emphasize that the success is due to ability and effort and failure is due to lack of effort; (c) The teacher should directly reinforce students for positive beliefs in their abilities and should encourage use of effort as a crucial determinant of the outcomes. Such techniques might be incorporated into structured training programs which would be used for changing attributions in a systematic way over a period of time.

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